FINAL REPORT

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KUTWOOD FORAGE DEMONSTRATION FARM AND IDENTIFICATION PROJECT

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Prepared by: Western Beef Development Centre Inc.

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PUNNICHY BEEF PRODUCERS

In Co-operation with:

Canada Saskatchewan Agri-Food Innovation Fund,
Saskatchewan Agriculture and Food, Extension Services,
Western Beef Development Centre
and
Ducks Unlimited Canada

Present:

FINAL REPORT

(Covers April 1998 - March 2002)

KUTWOOD FORAGE DEMONSTRATION

FARM AND IDENTIFICATION PROJECT

March, 2002

SUMMARY

This is the final report on our project and its purpose will be to summarize four years data on a trace back system as well as data from our grazing project.

Our objective was to demonstrate the advantages and practicality of a trace back system to producers, feeders, packers, and consumer.

The practicality of trace back does work and that continued refinement of the method needs to take place. Each segment of the beef industry can benefit from information generated. The producer by being able to identify superior economic genetics. The feedlot and packers by developing more predictability of quality of cattle coming through the system. The consumer has assurances that the beef industry places great value on safety and quality of food supply.

Our observation as producers is that it is imperative that an inexpensive method be set in place to return feeding and carcass data back to producer.

Our four year trial on the grazing project generated data economic return of grazing forages.

TECHNICAL REPORT

Background

This report will cover the full term of our project. It began in April, 1998 and will terminate when we get final information back on our fourth group of calves, sometime in April, 2002. The final slaughter information will not be available at the time of printing this report. A follow up will be completed.

This report will summarize the grazing data for four years and the carcass data for three years.

Throughout the duration of this project, the Punnichy Beef Producers (PBP) have worked in collaborations with Western Beef Development Centre (WBDC). They provided technical assistance with identity preservation and collection of carcass data. The WBDC kept the PBP informed of how our information tied in with the work they were doing on electronic trace-back.

General Background of Project

- PBP operate a rotational grazing pasture on a 1/4 section with 150 acres of seeded grass. There are five paddocks of meadow brome and alfalfa and two paddocks of crested wheat grass and alfalfa.

- The pasture is filled each spring with 50-60 cow-calf pairs from about 10-11 club members.

- Cattle are weighed three times during season start, middle and finish.

- In the fall the calves are weaned and sold to Poundmaker Feedlot at Lanigan to be fed to slaughter weight.

- Following spring, the calves are slaughtered at the packing plant in Moose Jaw.

- Meanwhile identity of calves is maintained throughout. In the first two years an electronic Alflex Tag was put in each calf's ear. WBDC had a hand held scanner which would be taken to a packing plant and data recorded. The last two years a tag system was used and the packing plant staff did the monitoring.

Objective

- To demonstrate the advantages and practicality of a trace-back system to producers, feeders, packers, and consumers.

- To demonstrate that such advantages can be shared by each segment of the industry and therefore, the initial identification costs should be shared by the industry.

- Although not outlined in our application, it has been the objective of our club to garner data from our grazing project to provide a source of information to other producers contemplating the economics of rotational grazing.

Activities

Broad outline of activities over the four years is as follows:

- fill pasture with cow-calf pairs.
- graze over the summer.
- calves sold to feedlot.
- calves sent to slaughter and carcass data returned to producers.

Other yearly activities included:

- field days which were open to the public.
- presentations of our results were made at conferences and seminars.
- club tours to feedlot, packing plant, and Termunda Farm.
- pasture technicians hired.
- periodic club meetings to keep members informed of our project and also up to date on other industry topics.

Achievements

- Operation of grazing pasture with compilation of economic data.
- Established a knowledgeable relationship with Poundmaker Feedlot.
- Understanding of carcass information and identification preservation.
- Hosting of successful field days filled with relevant industry information.
- Sharing of information via presentation, radio interview, and newspaper articles.
- Promotion of the livestock industries in our area.

RESULTS

The following tables summarize the data collected from our rotational grazing project.

Pounds of Beef

			ADG		Pounds of Beef	
Year	Number of Cow-Calf	Number of Days	Calves	Cows	Calves	Cows
1998	49	144	2.47	0.95	17429	6840
1999	56	140	2.72	0.96	21325	7526
2000	57	123	2.72	1.12	19070	7852
2001	58	100	2.85	0.48	16530	2784

VALUE OF BEEF

This table shows the value of calf production and relates it to a per acre basis. This value is for only the pounds the calves gained and not the total value of calves.

Year	Pounds of Beef	Average Price/Pound	Value	Return/Cult. Acre
1998	17429	1.08	18823	$125.49
1999	21325	1.27	27082	$180.55
2000	19070	1.39	26507	$176.72
2001	16530	1.58	26117	$174.12
			AVERAGE	$164.22

NET RETURN

This table shows net return after deducting direct expenses. These include land rent, pasture technician, supplies and minerals.

Year	Gross Return	Annual Expenses	Net Return	Net/Acre
1998	18870	6307	12563	$83.75
1999	27082	6634	20448	$136.32
2000	26507	6500	20007	$133.38
2001	26117	7500	18617	$124.11
			AVERAGE	$119.39

Each year the calves were weaned and sold to Poundmaker Feedlot to be finished. These calves were fed in a separate pen and records kept on gain.

The following table summarizes the results:

Year	Number of Head	Days on Feed	ADG	Cost of Gain*	Death
1998	56	203-216	3.33	$0.48/lb.	-
1999	49	190	3.28	$0.41/lb.	1 head
2000	59	193	3.32	$0.45/lb.	2 head
2001	RESULTS	NOT	IN	YET	

*This cost considers only the cost of feed and does not include yardage, interest, drugs, etc.

Once calves were finished at feedlot they were slaughtered at X-L Foods in Moose Jaw, Saskatchewan.

Appendix "A" is a sample of data which is generated once calves have moved through the whole cycle of finished beef. From this data each segment of the industry can gleam appropriate results and use them as aids in decision making.

The following table summarize the data generated at carcass stage of beef cycle.

Carcass Data:

Year	# of Head	Ave. Live Wt	Ave. Carcass Wt	Yield*	Price	Feedlot Profit	Mar AAA	bling AA	** A
98-99	56	1258	725	60.18%	$1.46/lb	$100.96	16%	70%	14%
99-00	48	1338	766	60.20%	$1.63/lb	$172.65	20%	72%	8%
00-01	57	1384	788	60.28%	$1.93/lb	$293.04	12%	88%	

*yield here is the percentage of lean meat in rib-eye area. It is established arbitrarily by the grader, but does correlate closely to carcass weight divided by 5% shrunk weight.

**all carcasses graded A1 with variations in marbling.

CONCLUSIONS

In relating our results to our objectives with regard to rotational grazing, our data would suggest that substantial revenues per acre can be generated. The challenge to producer is to sustain these results over a longer period of time.

The practicality of the trace-back system seems to be working after a great deal of effort by all players in the industry. The CC1A says they have over 8 million numbers from bar code tags in their data bank. They do feel however, that the bar code tag has limitations with readability at packing plant. Electronic ear tags do eliminate this problem and are the way of the future, but at present time are much more costly. CC1A are setting up trials with these tags.

The main advantage of carcass trace back to all segments of industry relate to having the

genetics in the cow herd to generate that most desirable and profitability carcass. If the producer can build up a data bank over a number of years on his breeding herd, changes can be made to directly impact his profitability.

Feedlots are looking for better predictability of genetics in cattle. Larger packages of uniform cattle with more producer interest in follow up are trends they promote. The days of buying and selling average cattle are becoming obsolete.

Packing plants want to be able to better identify animals which will have a higher tendency to grade premium. Trace back will help determine where different carcasses are coming from and what factors in cycle affect that carcass. Is premium beef related to days on feed or genetics?

It would seem that any changes a producer makes to improve on herd genetics, impacts throughout the industry.

Here lies a major concern of the trace back system. This carcass and feeding information is being generated, but how easily and inexpensively will it get back to the producers. The largest impact for improvement lies at producer level. A long term data base of information is required to make changes. If this data is not shared openly and economically, a good portion of potential for improvement will not be realized.

In discussing the data collected on PBP cattle and its value as management tool, it must be understood that each producer had only a few cattle in the project and not likely the same ones each year. The data is useful in culling and breeding and with a build up of many years data on major portion of herd the value is greatly enhanced.

Profitability of calves at various stages of industry is useful information. There are however many circumstances that affect profitability which can vary from year to year. Retaining ownership and selling on a rail grade basis can increase profitability but it also has more risk involved such as death loss, fluctuation in rail grad prices, and others. Producers have to overcome the issue of cash flow at weaning time and financing for feeding costs.

Individual profitability of animals is definitely valuable as management tool. Our results will once again be calculated in this form and each producer will receive a copy.

FURTHER DEVELOPMENT

- The final data on carcass will be collected and submitted. Slaughter date has been set for March 27, 2002.
- Club has rented pasture for another 3 years.
- Poundmaker feedlot has agreed to feed our calves again next year if we so choose.
- Club is in development stage for a larger pasture based on similar principals.

PERSONNEL

Over the course of our project we have had students hired each year to look after the cattle.

WBDC staff have worked with us on the collection of carcass data.

ACKNOWLEDGEMENTS

The Punnichy Beef Producers gratefully acknowledge the support from the Agri Food Innovation Fund. The results and discussion generated are valued by our members and it is hoped also by the industry. In recent conversation with people at CCIA, they indicated our input, regarding producer concerns, would help in shaping the direction of the next phase of the ID system. We will provide a letter to them outlining our position.

The PBP would also like to acknowledge the support of the Western Beef Development Centre. They provided the technical help in the trace back work and took a keen interest in our project and helped to keep us on track, as well as keeping us informed of other work they are doing.

Other contributors to our project are Ducks Unlimited, Sask. Agriculture and Food, PFRA, and many Agriculture Industries Companies.